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AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) An A computer-implemented inferred relation weighting process for determining a strength of an inferred relation between a first Internet object and a second Internet object, where the first and second Internet objects are not directly linked, comprising:

a first link weighting process for determining a first strength of a first link between said the first Internet object and a common object;

a second link weighting process for determining a second strength of a second link between the second Internet object and the common object, the first and second link weighting processes being performed by one or more processors; and

an inferred relation weight calculation process for determining the strength of the inferred relation based on the first strength and the second strength;

wherein the first Internet object comprises a query for retrieving a document and the second Internet object comprises a document, the inferred relation weight calculation process comprising:

determining a first array having entries comprising the first and second strengths;

determining a second array as a mathematical function of the first array, wherein the first and second arrays are stored in memory; and

determining a weighted sum of entries selected from the first and second arrays,

the weighted sum corresponding to the strength of the inferred relation; and

returning a group of Internet objects associated with the first Internet object to a

user, the group including the second Internet object, the second Internet object being

arranged within the group according to the strength of the inferred relation.

2. (Previously Presented) The inferred relation weighting process of claim 1, wherein

the common object comprises a plurality of Internet objects, the plurality of Internet objects

being interconnected via discrete links, the plurality of Internet objects being connected to the

first and second links; and

wherein the inferred relation weighting process further comprises:

an intermediate link weighting process for determining a strength of each discrete

link, wherein the strength of the inferred relation is based also on a strength of each

discrete link.

3. (Cancelled)

4. (Previously Presented) The inferred relation weighting process of claim 1, wherein

the common object comprises at least one Internet document.

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5. (Previously Presented) The inferred relation weighting process of claim 2, further comprising:

a link limitation process for specifying a link limit concerning a maximum number of links used to determine the inferred relation.

6. (Previously Presented) The inferred relation weighting process of claim 2, further comprising:

an incoming link analysis process for determining a number of objects linked to each Internet object, wherein an incoming link value of a target Internet object is proportional to a number of objects linked to the target Internet object.

7. (Previously Presented) The inferred relation weighting process of claim 2, further comprising:

an outgoing link analysis process for determining a number of objects that each Internet object is linked to, wherein an outgoing link value of a target Internet object is proportional to a number of objects to which the target Internet object is linked.

8. (Previously Presented) The inferred relation weighting process of claim 2, wherein the inferred relation weight calculation process comprises a relation recalculation process for redefining values corresponding to strengths of discrete links and to the first and second strengths in response to calculation of the strength of the inferred relation.

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9. (Previously Presented) The inferred relation weighting process of claim 1, wherein at least one of the Internet objects comprises a transaction record.

10. (Cancelled)

11. (Previously Presented) The inferred relation weighting process of claim 1, wherein at least one of the Internet objects comprises an Internet document.

12. (Previously Presented) The inferred relation weighting process of claim 1, wherein the strength of the inferred relation corresponds to a relevance score.

13. (Previously Presented) The inferred relation weighting process of claim 9, wherein the relevance score comprises a percentage.

14. (Currently Amended) ~~An~~ A computer-implemented inferred relation weighting process for determining a strength of an inferred relation between a first Internet object and a second Internet object, where the first and second Internet objects are not directly linked, comprising:

a first link weighting process for determining a first strength of a first link between the first Internet object and a plurality of common objects;

a second link weighting process for determining a second strength of a second link between the second Internet object and the plurality of common objects, wherein the plurality of common objects comprises a first common object connected to the first link, a second common object connected to the second link, and an intermediate link between the first and second common objects;

an intermediate link weighting process for determining a strength of the intermediate link, the first, second, and intermediate link weighting processes being performed by one or more processors; and

an inferred relation weight calculation process for determining the strength of the inferred relation based on the first strength, the second strength, and the strength of the intermediate link; wherein the first Internet object comprises a query for retrieving a document and the second Internet object comprises a document, the inferred relation weight calculation process comprising:

determining a first array having entries comprising the first and second strengths;

determining a second array as a mathematical function of the first array, wherein the first and second arrays are stored in memory; and

determining a weighted sum of entries selected from the first and second arrays, the weighted sum corresponding to the strength of the inferred relation; and

returning a group of Internet objects associated with the first Internet object, the group including the second Internet object, the second Internet object being arranged within the group according to the strength of the inferred relation.

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15. (Previously Presented) The inferred relation weighting process of claim 14, further comprising:

a link limitation process for specifying a link limit concerning a maximum number of links used to determine the inferred relation.

16. (Previously Presented) The inferred relation weighting process of claim 14, wherein the plurality of common objects comprises at least one Internet document.

17. (Previously Presented) The inferred relation weighting process of claim 14, wherein the intermediate link comprises at least one additional common object and a plurality of sub-links for connecting the at least one additional common object to the first and second common objects; and

wherein the intermediate link weighting process determines the strength of the intermediate link based on individual strengths of the sub-links.

18. (Previously Presented) The inferred relation weighting process of claim 17, further comprising:

an incoming link analysis process for determining a number of objects linked to each Internet object and common object, wherein an incoming link value of a target object is proportional to number of objects linked to the target object.

19. (Previously Presented) The inferred relation weighting process of claim 17, further comprising:

an outgoing link analysis process for determining a number of objects that each Internet object and common object is linked to, wherein an outgoing link value of a target object is proportional to a number of objects to which the target object is linked.

20. (Previously Presented) The inferred relation weighting process of claim 17, wherein the inferred relation weight calculation process comprises a relation recalculation process for redefining values corresponding to strengths of the sub-links and to the first and second strengths in response to calculation of the strength of the inferred relation.

21. (Previously Presented) The inferred relation weighting process of claim 14, wherein at least one of the Internet objects comprises a transaction record.

22. (Cancelled)

23. (Previously Presented) The inferred relation weighting process of claim 14, wherein at least one of the Internet objects comprises an Internet document.

24. (Previously Presented) The inferred relation weighting process of claim 14, wherein the strength of the inferred relation corresponds to a relevance score.

25. (Previously Presented) The inferred relation weighting process of claim 24, wherein the relevance score comprises a percentage.

26. (Currently Amended) A computer-implemented method for determining a strength of an inferred relation between a first Internet object and a second Internet object, where the first and second Internet objects are not directly linked, the method comprising:

determining a first strength of a first link between the first Internet object and a common object;

determining a second strength of a second link between the second Internet object and the common object; and

determining a strength of the inferred relation based on the first strength and the second strength, wherein the first strength, the second strength, and the strength of the inferred relation are determined by one or more processors;

wherein the first Internet object comprises a query for retrieving a document and the second Internet object comprises a document, and wherein calculating a strength of the inferred relation comprises:

determining a first array having entries comprising the first and second strengths;

determining a second array as a mathematical function of the first array; and

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determining a weighted sum of entries selected from the first and second arrays,

wherein the first and second arrays are stored in memory, the weighted sum

corresponding to the strength of the inferred relation; and

returning a group of Internet objects associated with the first Internet object, the group

including the second Internet object, the second Internet object being arranged within the group

according to the strength of the inferred relation.

27. (Previously Presented) The method of claim 26, wherein the common object

comprises a plurality of Internet objects, the plurality of Internet objects being connected via

discrete links, wherein determining the strength of the inferred relation further comprises:

determining a strength of each discrete link, wherein the strength of the inferred

relation is based also on a strength of each discrete link.

28. (Previously Presented) The method of claim 27, further comprising:

specifying a link limit concerning a maximum number of links used to determine the

inferred relation.

29. (Currently Amended) A machine-readable medium for storing instructions for

implementing an inferred relation weighting process, the inferred relation weighting process for

determining a strength of an inferred relation between a first Internet object and a second Internet

object, where the first and second Internet objects are not directly linked, wherein the

instructions, when executed by a processor, cause the processor to:

determine a first strength of a first link between the first Internet object and a common

object;

determine a second strength of a second link between the second Internet object and the

common object; and

determine the strength of the inferred relation based on the first strength and the second

strength by:

determining a first array having entries comprising the first and second strengths;

determining a second array as a mathematical function of the first array; and

determining a weighted sum of entries selected from the first and second arrays,

the weighted sum corresponding to the strength of the inferred relation; wherein the first

Internet object comprises a query for retrieving a document and the second Internet

object comprises a document; and

return a group of Internet objects associated with the first Internet object, the group

including the second Internet object, the second Internet object being arranged within the group

according to the strength of the inferred relation.

30. (Previously Presented) The machine-readable medium of claim 29, wherein the

machine-readable medium comprises a random access memory (RAM).

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31. (Previously Presented) The machine-readable medium of claim 29, wherein the machine-readable medium comprises a read only memory (ROM).

32. (Previously Presented) The machine-readable medium of claim 29, wherein the machine-readable medium comprises a hard disk drive.

33. (Currently Amended) An apparatus for executing an inferred relation weighting process for determining a strength of an inferred relation between a first Internet object and a second Internet object, where the first and second Internet objects are not directly linked, the apparatus comprising:

memory to store instructions that are executable; and

at least one processing device to execute the instructions to:

determine a first strength of a first link between the first Internet object and a common object;

determine a second strength of a second link between the second Internet object and the common object; and

determine the strength of the inferred relation based on the first strength and the second strength by:

determining a first array having entries comprising the first and second strengths;

determining a second array as a mathematical function of the first array;

~~and~~

determining a weighted sum of entries selected from the first and second

arrays, the weighted sum corresponding to the strength of the inferred relation;

wherein the first Internet object comprises a query for retrieving a document and

the second Internet object comprises a document; and

returning a group of Internet objects associated with the first Internet object, the

group including the second Internet object, the second Internet object being arranged

within the group according to the strength of the inferred relation.

34. (Previously Presented) The apparatus of claim 33, wherein the processor and

memory are part of into a personal computer.

35. (Previously Presented) The apparatus of claim 33, wherein the processor and

memory are part of into a network server.

36. (Previously Presented) The apparatus of claim 33, wherein the processor and

memory are part of into a single board computer.